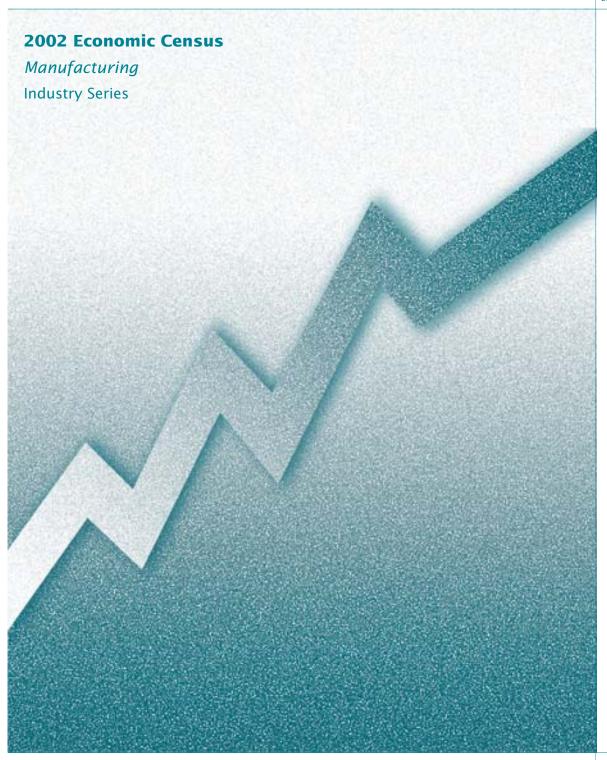
Motor Vehicle Air-Conditioning Manufacturing: 2002

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CONTENTS

	duction to the Economic Census	v ix
Table	es	
1. 2. 3. 4. 5. 6a. 6b. 7.	Historical Statistics for the Industry: 2002 and Earlier Years Industry Statistics for Selected States: 2002 Detailed Statistics by Industry: 2002 Industry Statistics by Employment Size: 2002 Industry Statistics by Primary Product Class Specialization: 2002 Products Statistics: 2002 and 1997 Product Class Shipments for Selected States: 2002 and 1997 Materials Consumed by Kind: 2002 and 1997	1 2 3 4 5 6 7 8
Appe	endixes	
A. B. C. D. E. F.	Explanation of Terms NAICS Codes, Titles, and Descriptions Methodology Geographic Notes Metropolitan and Micropolitan Statistical Areas Comparability of Product Classes and Product Codes: 2002 to 1997	A-1 B-1 C-1 F-1

-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

		All estab- lish- ments ³	All employees		Production workers				Total	Total	Total capital
Industry and year ¹	Com- panies ²		Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
336391, Motor vehicle air-conditioning			4= ==4	057 700	44.005			0 400 004	0.540.704		224 222
manufacturing2002 2001	74 N	81 N	17 551 19 594	857 728 1 054 336	14 065 16 031	28 286 32 042	634 988 799 321	2 438 264 2 323 892	3 546 791 3 287 899	5 987 666 5 623 073	204 698 248 486
2000	N	N	20 393	1 058 060	16 880	35 301	797 107	2 175 068	3 173 022	5 364 668	243 141
1999	N	N	21 477	1 169 656	17 829	39 831	886 614	2 713 599	3 363 162	6 065 425	360 823
1998 1997	N 58	N 60	21 310 21 522	999 087 1 053 943	17 402 17 504	38 405 38 953	755 741 821 334	2 606 692 2 701 288	3 001 970 2 875 912	5 568 484 5 626 596	259 407 188 566

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

		All establishments ²		All employees		Production workers						
Industry and geographic area	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)		Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
336391, Motor vehicle air-conditioning manufacturing												
United States. Michigan. Ohio Pennsylvania Texas	<u>-</u>	81 7 7 4 23	42 7 5 3 10	17 551 3 436 2 364 225 2 013	857 728 189 506 105 613 11 010 72 839	14 065 2 737 1 959 116 1 574	28 286 5 743 4 037 216 1 982	634 988 143 715 84 839 3 936 44 740	2 438 264 801 926 635 732 34 395 149 370	1 209 590	5 987 666 2 010 601 1 018 077 88 495 614 210	204 698 62 478 34 204 1 440 39 113

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

¹Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
336391, Motor vehicle air-conditioning manufacturing	
Companies ¹ number	74
All establishments ²	81 39 18 24
All employees3 number Total compensation \$1,000 Annual payroll \$1,000 Total fringe benefits \$1,000	17 551 1 307 687 857 728 449 959
Production workers, average for year	14 065 15 469 13 853 13 668 13 259
Production worker hours	28 286 634 988
Total cost of materials \$1,000 Materials, parts, containers, packaging, etc., used \$1,000 Resales \$1,000 Purchased fuels \$1,000 Purchased electricity \$1,000 Contract work \$1,000	3 546 791 3 085 955 375 478 9 669 57 947 17 742
Quantity of electricity purchased for heat and power	1 634 751 _
Total value of shipments \$1,000 Primary products value of shipments \$1,000 Secondary products value of shipments \$1,000 Total miscellaneous receipts \$1,000 Value of resales \$1,000 Contract receipts \$1,000 Other miscellaneous receipts \$1,000	5 987 666 4 599 209 949 057 439 400 432 065 7 335
Primary products specialization ratio percent. Value of primary products shipments made in all industries \$1,000. Value of primary products shipments made in this industry \$1,000. Value of primary products shipments made in other industries \$1,000.	83 4 664 229 4 599 209 65 020
Coverage ratiopercent.	99
Value added	2 438 264
Total inventories, beginning of year \$1,000. Finished goods inventories \$1,000. Work-in-process inventories \$1,000. Materials and supplies inventories \$1,000.	384 037 118 177 77 907 187 953
Total inventories, end of year \$1,000. Finished goods inventories \$1,000. Work-in-process inventories \$1,000. Materials and supplies inventories \$1,000.	385 502 109 833 83 640 192 029
Gross value of depreciable assets (acquisition costs) at beginning of year \$1,000. Total capital expenditures (new and used) \$1,000. Buildings and other structures (new and used) \$1,000. Machinery and equipment (new and used) \$1,000. Automobiles, trucks, etc., for highway use \$1,000. Computers and peripheral data processing equipment \$1,000. All other expenditures for machinery and equipment \$1,000. Total retirements \$1,000. Gross value of depreciable assets at end of year \$1,000.	2 690 727 204 698 11 222 193 476 3 675 8 099 181 702 373 639 2 521 786
Depreciation charges during year\$1,000.	155 588
Total rental payments \$1,000 . Buildings and other structures \$1,000 . Machinery and equipment \$1,000 .	26 545 11 160 15 385
Total other expenses ⁴ . \$1,000. Response coverage ratio ⁵ . percent. Repair and maintenance services of buildings and/or machinery ⁴ . \$1,000. Communications services ⁴ . \$1,000. Legal services ⁴ . \$1,000. Accounting, auditing, and bookkeeping services ⁴ . \$1,000. Advertising and promotional services ⁴ . \$1,000. Expensed computer hardware and supplies and purchased computer services ⁴ . \$1,000. Refuse removal (including hazardous waste) services ⁴ . \$1,000. Management consulting and administrative services ⁴ . \$1,000. Taxes and license fees ⁴ . \$1,000. All other expenses ⁴ . \$1,000.	234 695 94 37 213 1 686 778 946 1 591 33 257 1 612 11 121 10 763 135 728

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
2Includes establishments with payroll at any time during the year.
3Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.
4Based on Annual Survey of Manufactures (ASM) sample data.
5A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class			All emp	oloyees	Pr	roduction worke	ers		Total	Total	Total capital
		All estab- lish- ments ²	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
336391, Motor vehicle air- conditioning manufacturing											
All establishments	-	81	17 551	857 728	14 065	28 286	634 988	2 438 264	3 546 791	5 987 666	204 698
1 to 4 employees. 5 to 9 employees. 10 to 19 employees. 20 to 49 employees 50 to 99 employees 100 to 249 employees 250 to 499 employees 500 to 999 employees 500 to 999 employees 1,000 to 2,499 employees 2,500 employees or more	9 8 6 1 1 - -	25 8 6 12 6 14 1 5 2 2	58 50 77 375 381 2 310 e h h	3 081 2 838 3 215 19 611 14 368 95 750 D D	49 43 57 255 249 1 861 D D D	95 88 98 458 506 3 892 D D D	2 327 2 192 2 234 9 208 7 180 67 272 D D D	4 651 4 943 6 687 33 151 30 977 369 693 D D D	4 781 4 529 7 436 65 704 29 767 499 559 D D D	9 435 9 472 14 040 95 478 61 004 869 129 D D D	579 550 673 7 082 2 412 14 348 D D D D
Administrative records ⁴	9	31	157	9 033	137	280	6 940	13 867	14 375	28 242	1 737

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

¹Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	A.II	All em	ployees	Pr	oduction work	ers		Total	Total	Total capital
		All estab- lish- ments ¹	Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	value of shipments (\$1,000)	expendi-
336391	Motor vehicle air-conditioning manufacturing	81	17 551	857 728	14 065	28 286	634 988	2 438 264	3 546 791	5 987 666	204 698
3363917 336391B	Motor vehicle mechanical air- conditioning systems Automotive air-conditioning	34	10 401	543 205	8 346	17 797	407 680	1 977 809	2 010 815	3 986 741	73 987
	compressors (open-type, with or without motor)	16	7 018	307 106	5 605	10 265	221 627	451 274	1 526 441	1 982 209	129 552

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

	31 7 1 0 7 1			, ,		
		Number of		Product shipments		
Product code	Product	companies with shipments of \$100,000 or more	Quantity of production for all purposes	Quantity	Value (\$1,000)	
336391	Motor vehicle air-conditioning manufacturing	N N	X	X	4 664 229 4 225 742	
3363917	Motor vehicle mechanical air-conditioning systems	N N	X	X X	2 940 311 2 266 279	
33639171	Motor vehicle mechanical air-conditioning systems	N N	x X	X X	2 940 311 2 266 279	
3363917110	Motor vehicle mechanical air-conditioning systems for passenger automobiles	21	X	X	2 149 296	
3363917120	Motor vehicle mechanical air-conditioning systems for	21	x	â	1 592 434	
3303917120	buses ¹	9 9	X	X	162 909 143 004	
3363917130	Other motor vehicle mechanical air-condition systems ¹	14	X X	X X	628 106 530 841	
3363917Y	Motor vehicle mechanical air-conditioning systems, nsk	N N N	X X	X X	330 641	
3363917YWV	Motor vehicle mechanical air-conditioning systems, nsk	N N	X	x x	= =	
336391B	Automotive air-conditioning compressors (open-type, with or without motor)	N N	×	X	1 707 182 1 937 805	
336391B1	Automotive air-conditioning compressors (open-type, with or without motor)	N N	X	X	1 707 182	
336391B100	1997	N N	â	â	1 937 805	
3303911100	Automotive air-conditioning compressors (open-type, with or without motor) ¹	22 13	X X	X	1 707 182 1 937 805	
336391W	Motor vehicle air-conditioning manufacturing, nsk, total	N N	X	X	16 736 21 658	
336391WY	Motor vehicle air-conditioning manufacturing, nsk, total	N N	X	x x	16 736 21 658	
336391WYWW	Motor vehicle air-conditioning manufacturing, nsk, for nonadministrative-record establishments	N N	X	X	58 160	
336391WYWY	Motor vehicle air-conditioning manufacturing, nsk, for administrative-record establishments	N N	X	X	16 678 21 498	

¹For additional detail, see Current Industrial Report MA333M, Refrigeration and Heating Equipment.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3363917	Motor vehicle mechanical air-conditioning systems	
	United States	2 940 311 2 266 279
	Michigan	983 081
	1997 Texas	88 673 61 200
336391B	Automotive air-conditioning compressors (open-type, with or without motor)	
	United States. 2002.	1 707 182
	1997 1997 Texas	1 937 805 N 396 763 N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
336391	Motor vehicle air-conditioning manufacturing		
00900001	Total materials	X X	3 085 955 2 628 866
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment		568 475
33531209	Fractional horsepower electric timing motors, synchronous and subsynchronous (less than 1	X	465 873
5555.255	hp)	X	2 880 D
33531223	Fractional horsepower electric motors (less than 1 hp), excluding timing motors		D
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	D D
33341200	1997. Fans and blowers	X X X X X	10 246 21 629
00100001	1997		8 182
001900B1	Electrical transmission, distribution, and control equipment	X X X X X	D 37 078
33593101 33451200	Current-carrying wiring devices	×	88 351 58 811 D
33431200	Administration temperature controls (infermostats, regulators, etc.)	â	170 392
33299101	Ball and roller bearings (mounted or unmounted)	X	85 584 47 646
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	145 222 86 492
332000AC	Metal stampings	X X X X X	D 92 728
33251005	Metal hardware (including hinges, handles, locks, casters, etc.)		D
33291901	Metal pipe, valves, and pipe fittings (excluding forgings)	X	D 17 460
33200053	All other fabricated metal products (excluding forgings)	X X X X X	9 738 D
	1997		D
33210000	Forgings	X X X X X	58 735 N
33151001	Iron and steel castings (rough and semifinished)	X	D D
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	×	D 181 782
33120007	Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products)	X	15 728 13 767
33120016	Steel sheet and strip (including tinplate)	Ŷ	5 707 N
33120025	Steel wire and wire products	X X X X X	D D
33120035	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products)	X	15 874
33142135	Copper and copper-base alloy pipe and tube (excluding castings, forgings, and fabricated metal		8 837
	products)	X	7 076 5 155
33142141	All other copper and copper-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	X	D
22121500	1997		N D
33131500 33100055	All other aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	N N
33100033	and fabricated metal products)	×	D D
33100082	Other nonferrous metal shapes and forms (excluding aluminum and aluminum-base alloy and copper and copper-base alloy castings, forgings, and fabricated metal products)	×	3 680
	1997	X	N
32220017	Paper and paperboard containers (including shipping sacks and other paper packaging supplies)	x	18 208
32192003	Wooden containers, complete (including combination wood and paperboard)	X	10 182 D
32551002	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied product	X X X X X	723 2 307
00540007	1997		N
32510027 32521105	Refrigerant gases and other synthetic organic chemicals	X X X X X	2 628 D D
32610013	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc	Ŷ	D 44 765
32010010	1997.	â	44 763 D
32610007	Fabricated plastics products (excluding gaskets, hoses, and belting)	X	75 100 65 925
32622001	Rubber and plastics hose and belting	X X X X X	110 753 51 978
33999101	Gaskets (all types) and asbestos packing	X	28 081 D
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.)	x	D
00970099	All other materials and components, parts, containers, and supplies	X X X X X	N 861 224
00971000	Materials, ingredients, containers, and supplies, nsk	X	750 062 17 282
	1997	Х	22 726

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.